WHAT IS CLAIMED IS:

1. A method of reducing power consumption in a computing device including a processor, comprising:

5   determining a first duration to a next expected event in the computing device;

comparing the first duration to a minimum duration; and

if the first duration is greater than or equal to the minimum duration, then:

entering a processor sleep state for a sleep duration; and

entering a processor running state upon expiry of the sleep duration and before the

10   next expected event.

2. The method of claim 1 further comprising:

entering the processor running state before expiry of the sleep duration upon receipt of a user input.

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3. The method of claim 1 wherein the processor sleep state is only entered if processor load has fallen below a predetermined threshold.

4. The method of claim 1 further comprising:

20   synchronizing at least two expected events to increase a duration to the next expected event.

5. The method of claim 1 wherein the processor sleep state is entered only if the processor is spending more than a certain percentage of its time in a processor idle loop.

25   6. The method of claim 1 wherein the sleep duration is less than or equal to one second.

7. The method of claim 3 wherein the processor load is determined heuristically.

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8. The method of claim 1 wherein the computing device includes a display device, the method further comprising:

displaying an image on the display device during the sleep duration.

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9. The method of claim 8 wherein the display device is switched into a static mode during the sleep duration.

10. The method of claim 9 wherein the computing device includes a touch input device, the method further comprising:

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keeping the touch input device enabled during the sleep duration.

11. The method of claim 9 further comprising:

switching the display device off if user input is not received within a predetermined shutoff time.

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12. The method of claim 10 further comprising:

disabling the touch input device if user input is not received within a predetermined shutoff time.

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13. The method of claim 1 wherein the sleep duration is determined by subtracting from the first duration a time needed to enter the processor running state.

14. The method of claim 1 wherein the minimum duration is a duration below which it would consume more energy to enter the processor sleep state and subsequently enter the processor running state than it would be consumed to idle the processor for the same duration.

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15. The method of claim 1, comprising:

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idling the processor if the first duration is less than the minimum duration.

16. The method of claim 15 wherein the step of idling the processor comprises the step of stopping a processor clock.

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17. A computing device comprising a processor, the computing device in use reducing power consumption by:

determining a first duration to a next expected event in the computing device;

comparing the first duration to a minimum duration; and

10   if the first duration is greater than or equal to the minimum duration, then:

        entering a processor sleep state for a sleep duration; and

        entering a processor running state upon expiry of the sleep duration and before the next expected event.

15   18. The computing device of claim 17, wherein the computing device in use:

enters the processor running state before expiry of the sleep duration upon receipt of a user input.

19. The computing device of claim 18, wherein the computing device in use:

20   synchronizes at least two expected events to increase a duration to the next expected event.

20. The computing device of claim 17 wherein the processor sleep state is entered only down if the processor is spending more than a certain percentage of its time in a processor idle loop.

25   21. The computing device of claim 18 wherein the sleep duration is less than or equal to one second.

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22. The computing device of claim 18 further comprising

a display device, wherein an image is displayed on the display device during the sleep duration.

5   23. The computing device of claim 18 further comprising:

a user input device, the user input device remaining enabled during the sleep duration.

24. The computing device of claim 22 further comprising:

a user input device, the user input device remaining enabled during the sleep duration.

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25. The computing device of claim 22 wherein the display device is switched off if user input is not received within a predetermined shutoff time.

26. The computing device of claim 23 wherein the user input device is disabled if user input is not received within a predetermined shutoff time.

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27. The computing device of claim 17 wherein the minimum duration is the duration below which it would consume more energy to enter the processor sleep state and subsequently enter the processor running state than it would be consumed to idle the processor for the same

20   duration.

28. The computing device of claim 23 wherein the user input device is a touch input device.

29. The computing device of claim 24 wherein the user input device is a touch input device.

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30. The computing device of claim 26 wherein the user input device is a touch input device.

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